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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,359	09/16/2003	Prashant G. Karandikar	M-102-E	1655

7590 06/16/2005

M Cubed Technologies, Inc.  
1 Tralee Industrial Park  
Newark, DE 19711

EXAMINER
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DIXON, MERRICK L

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/663,359

Applicant(s)

KARANDIKAR ET AL.

Examiner

Merrick Dixon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.



**MERRICK DIXON**  
**PRIMARY EXAMINER**

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to under 35 USC 112, first paragraph, as the specification, as originally filed, does not provide support for the invention as is now claimed. The examiner is unable to find disclosure for the coating being "non-graphite" ,as now amended in claim 1. Also, the examiner is unable to find an "amorphous" silicon metal, as now amended in claim 18, any within the specification.

2. Claims 1-17 and 18-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 2-17 and 19-22 depend from claims 1 and 18 .

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 12-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Papenburg et al(US 5505805) for reasons as set forth in the previous office action , inter alla. New claim 23, recites process steps. A specific technique during the making of the

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article. The invention, however, is directed to article limitations. The reference teaches the claimed article limitations for reasons set forth above. The cited reference, however, teaches that it is known in the instant art to utilize chemical vapor deposition techniques in the instant patent-col 7, lines 46-52 as required by new claim 23.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papenburg et al(US 5505805) in view of Bommier et al(US 5643663) for reasons as set forth in the previous office action, inter alla..

7. Applicant's arguments filed 3-17-05 have been fully considered but they are not persuasive. The examiner has studied applicants remarks as filed and responds hereinafter accordingly. First, applicants, it appears, are attempting to employ deductive reasoning in now claiming the coating to be non-graphitic. Arguing that the cited reference subjects its material to temperatures of above 2000 deg C while the claimed invention employs temperature of about 900 deg C means the instant claimed coating is non-graphitic. The examiner respectfully disagrees and reminds applicants that such limitations must be expressly stated in the spec. to have support therein. Applicants argue that the claimed invention 'skips' one step (the graphitizing step) during its production and thus is novel. The examiner disagrees . the instant claimed

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invention is directed to article limitations and not process steps. The cited reference teaches the claimed invention for reasons as before articulated. Any additional steps employed in the making of the article, it is submitted, is of no patentable consequences to the instant question for patentability. Applicants further argue that , claim 18 as amended, is unobvious over the cited art of record . the examiner, however, is unable to find support for this new limitation in the four corners of the specification . applicants are requested to show such support. Applicants argue that new claim 23, plasma-enhanced chemical vapor deposition process is significant. To this the examiner reminds applicants that the primary reference teaches chemical vapor deposition, as discussed above. Such specific deposition, as plasma-enhanced chemical vapor deposition would be included in the reference's disclosure , in the absence of unexpected results and particularly as the reference does not exclude same.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Applicants who wish to send a facsimile (draft copies) for the examiner's immediate review can do so by using the Examiner's personal fax number at 571-273-1520. The faxing of all papers must conform with the notice published in the Official Gazette, 1096 O.G. 30 ( November 15, 1989). **NOTE: All facsimiles sent to the examiner's personal fax number should be in draft-forms and will be treated as informal.**

**Same facsimiles will not be entered** in the related applications unless otherwise agreed and noted by the examiner.

**The fax number for all other fascimile is 703-872-9306.**

Information about **the status of an application** may be obtained from the Patent Information Retrieval system (**Private PAIR**).

Status inquires for **published applications** may be retrieved from either **Private PAIR** or **Public PAIR**. Questions about the PAIR system should be directed to the Electronic Business Center at **866-217-9197**.

Any questions concerning the instant communication should be directed to Examiner Dixon, at 571-272-1520, Mondays to Thursdays, between 12 noon and 8 PM, eastern time . The examiner's supervisor, Mrs. Rena Dye, can be reached at 571-272-3186.

A handwritten signature in black ink, appearing to read 'Merrick Dixon', with a stylized flourish at the end.

Merrick Dixon